



OODA loop

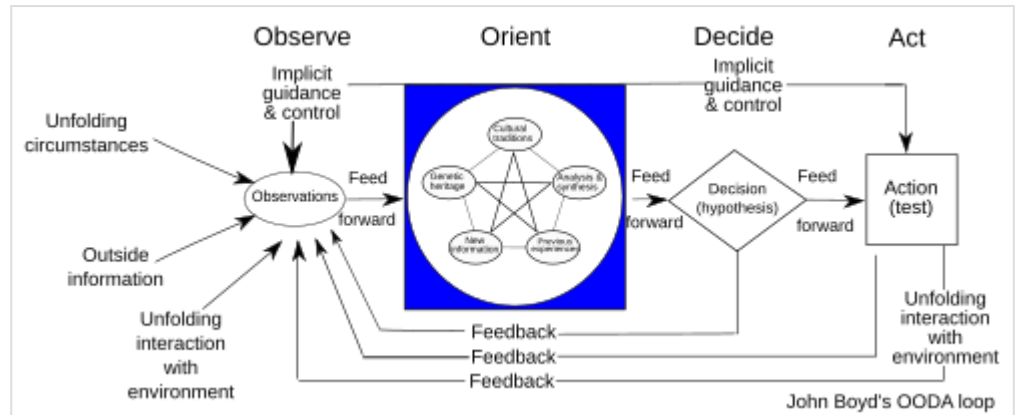


Diagram of the OODA loop

The **OODA loop** (observe, orient, decide, act) is a decision-making model developed by military strategist and United States Air Force Colonel John Boyd. He applied the concept to the combat operations process, often at the operational level during military campaigns. It is often applied to understand commercial operations and learning processes. The approach explains how agility can overcome raw power in dealing with human opponents. It is especially applicable to cyber security and cyberwarfare.^[1]

The OODA loop has become an important concept in litigation,^[2] business,^[3] law enforcement,^[4] management education,^[5] and military strategy. According to Boyd, decision-making occurs in a recurring cycle of "observe, orient, decide, act". An entity (whether an individual or an organization) that can process this cycle quickly, observing and reacting to unfolding events more rapidly than an opponent, can thereby get inside the opponent's decision cycle and gain the advantage.

Dominic Cummings, Chief Advisor to the UK Prime Minister Boris Johnson, credited the success of the Vote Leave campaign in the 2016 United Kingdom European Union membership referendum to its faster processing of OODA loops, along with the focus of Vote Leave on disrupting the OODA loops of the opposing Britain Stronger in Europe campaign team.^[6]

Some scholars are critical of the concept. Aviation historian Michael Hankins, for example, writes that "the OODA loop is vague enough that its defenders and attackers can each see what they want to see in it. For some, the OODA concept's flexibility is its strength, but for others it becomes so generalized as to lose its usefulness." He concludes that "The OODA loop is merely one way among a myriad of ways of describing intuitive processes of learning and decision making that most people experience daily. It is not incorrect, but neither is it unique or especially profound."^[7]

See also

- Decision cycle
- Double-loop learning
- Feedback loop

- Improvement cycle
 - DMAIC
 - PDCA
- Learning cycle
- Maneuver warfare
- Mental model
- Nursing process
- Problem solving
- Situation awareness
- SWOT analysis
- United States Army Strategist

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3. Richards pp. 162–171.
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External links

- [Archived documents \(http://danford.net/boyd/\)](http://danford.net/boyd/)
 - [Video: The OODA Loop and Clausewitzian "Friction" \(https://archive.today/20130410125924/http://www.askimo.com/pages/PlayVideo.aspx?vid=2812\)](https://archive.today/20130410125924/http://www.askimo.com/pages/PlayVideo.aspx?vid=2812)
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 - [OODA Loop 2.0: Information, Not Agility, Is Life OODA Loop 2.0: Information, Not Agility, Is Life \(https://breakingdefense.com/2017/05/ooda-loop-2-0-information-not-agility-is-life/\)](https://breakingdefense.com/2017/05/ooda-loop-2-0-information-not-agility-is-life/)
 - [OODA Loop in Emergency Preparedness OODA Loop in Emergency Preparedness \(https://www.safecastle.com/blogs/safecastle-blog/boyds-ooda-loop-and-you-how-to-train-your-brain-for-an-emergency/\)](https://www.safecastle.com/blogs/safecastle-blog/boyds-ooda-loop-and-you-how-to-train-your-brain-for-an-emergency/)
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